Not surprisingly, AT&T didn't recommend a cost of capital adjustment in its own price cap review proceeding, and didn't examine whether its own enterprise was more capital intensive than the economy in general. AT&T was also silent concerning any pass-through of changes in capital costs to its own price cap indices.

US West's Comments underscore another problem (US West, p. 39). An adjustment for interest rate changes may introduce a bias into production functions. With such an adjustment, LECs would have an incentive to substitute capital for labor or other inputs. LECs would be encouraged to employ fewer employees and use less noncapital inputs than they would in the absence of a cost of capital adjustment. The lesson — which is hardly contestable — is that singling out one input cost for special adjustment would skew decisionmaking just as it did under ROR regulation.

Finally, there's nothing unreasonable about the rates of return that have been earned by price cap LECs. They have been within (in our own case, at the lower end) of the ranges earned by companies that compete in the capital markets with us, as shown in Table 1 (above, following Summary). Indeed, they were within the range the Commission decided would be reasonable when it adopted price cap regulation. 22

Price cap regulation and competition have increased our business risk and, accordingly, the return on equity that investors require. It's important to note that the expected

²² See Pacific, p. 36.

amount of competition, not the current amount, is what determines this expected return. 23 It's ironic -- and important to remember -- that we compete with AT&T, MCI, and Sprint for both customers and capital. That's why actions that affect their rates, and our rate of return, have serious consequences for competition as a whole.

If the Commission reduces our rates, our allowed return, or our sharing thresholds, it must also consider the strong possibility that such reductions, like the reductions in 1992 and 1993, won't benefit end users anyway. (See above, p. vii.)

C. Earnings "Manipulations"

MCI has implied (MCI, pp. 33-35) that the LECs have manipulated their sharing obligations by recording large expenses in the fourth quarter of each year. MCI's claim is implausible. We suspect that MCI doesn't comprehend the requirements of Generally Accepted Accounting Principles (GAAP), the basic financial reporting rules of the Securities and Exchange Commission (SEC), and independent auditing standards. Our suspicion is strengthened by MCI's recommendation that the LECs should publicly disclose each September all significant expenses that will be booked in the fourth quarter. Under GAAP we would be required to book these expenses in September, if issues and amounts were known and reasonably estimable at that time.

See Darby May 9, 1994 Report, pp. 8-12.

Like all publicly traded companies, our accounting records are prepared in accordance with GAAP. Our interstate results from which sharable earnings are calculated also must comply with the Commission's Part 32 rules (the Uniform System of Accounts). GAAP dictates when an expense must be recognized for external reporting. Neither GAAP nor SEC regulations permit us to distort or contrive annual or interim financial reports either by shifting expense recognition into inappropriate reporting periods or by manufacturing accounting entries that are not based on economic reality. Our books of account and external financial statements are annually audited and certified by Coopers & Lybrand, who could not condone reporting violations.

Moreover, a carrier wouldn't benefit by recognizing additional expenses in the fourth quarter. Sharable earnings are calculated on a calendar year basis. Shifting expenses among interim reporting periods within the same calendar year wouldn't change calendar year earnings or sharing. In addition, Pacific Bell's intrastate earnings have never been in the sharing range; therefore, increased expenses of \$10 would only reduce interstate sharings by about \$1. It is implausible to claim that for a relatively minor reduction in sharing, we would sacrifice significant earnings. Like MCI, we strive to increase shareholder value by increasing earnings. The only reason for booking expenses in the fourth quarter is because they are required by GAAP and/or the Commission's rules to be booked at that time.

We note with interest that MCI's last five annual shareholder reports (1989-1993) show its fourth quarter expenses are consistently the highest of the year. 24 We know this can't be an attempt to manipulate sharing, because fortunately for it, MCI has no sharing obligations. We wonder by what logic MCI rationalizes that in our case there must be some ulterior motive for booking expenses in the fourth quarter of the year.

II. NO INCREASE IN THE PRODUCTIVITY FACTOR IS JUSTIFIED.

Various parties advocate a higher productivity factor be imposed for the next price cap period. 25 Almost all of these parties make the same mistake. They propose to modify the productivity factor based on achieved interstate <u>earnings</u>, rather than <u>productivity</u>. This would completely undermine the incentive to be efficient that makes price cap regulation work.

Dr. Mark Schankerman summarized the key features of a properly designed productivity offset in the Report he prepared for GTE's Comments in this proceeding. First, the productivity offset should reflect the difference between the rate of growth in total factor productivity (TFP) for our industry and the economy as a whole. Second, the productivity offset must

The only exception was in 1990 when third quarter expenses exceeded fourth quarter expenses, largely because of a \$550 million writedown of impaired analog equipment and related support assets and recognition of estimated decommissioning costs and other digitization expenses. Excluding the third quarter of 1990, fourth quarter expenses during 1989 - 1993 were on average about 9% higher than the expenses recognized in any of the previous quarters of the same years.

²⁵ See <u>e.g.</u> Ad Hoc, p. 18; MCI, p. 22; AT&T, p. 23; OCCO, p. 7; GSA, p. 8.

reflect the loss of business that will result from competition, which will reduce the ratio of outputs to inputs and thus reduce TFP. Third, the productivity offset must not be calibrated to match the actual performance of individual carriers. To do so would penalize efficient carriers and reward inefficient ones, just the opposite of what price cap regulation strives to accomplish. Fourth, the productivity offset should be based on long run movements in TFP, which tend to vary sharply over short periods. Finally, the productivity offset must be based on the industry's historical results, not on forecasts. The Christensen Report submitted with USTA's Comments showed that the growth in the TFP for our industry exceeded that of the general economy by 1.7%.

Measures of productivity based on interstate earnings are no substitute for a comprehensive TFP study like

Christensen's. If interstate earnings are used to develop a "productivity" value, the measure is distorted by the vagaries of the separations process. Regulated interstate earnings are also distorted by the unrealistic equipment lives mandated by regulators for recording depreciation. Under ROR regulation, it

To the degree the Commission considers future productivity relevant, it must consider that as we lose business to competition, our productivity will be reduced. The expected decrease in the industry's productivity differential is also substantiated by the Council of Economic Advisors' study. The CEA reported that "as regulatory distortions are removed [from the telecommunications sector] and resources shift into this sector ... the sector's productivity advantage will decline."

U.S. Council of Economic Advisors, Economic Benefits of the Administration's Legislative Proposals for Telecommunications, June 14, 1994, p. 7.

may have been just and reasonable for regulators to order us to depreciate in ten years what AT&T can depreciate in five. But insofar as reality is concerned, both depreciation lives can't be true. As we compete with AT&T, the consequences of the gap between five and ten year lives become impossible to justify. In contrast, TFP studies compare total outputs to total inputs, accounting for such factors as depreciation and separations.

AT&T's recommendation for an increase in the LEC productivity factor is based on interstate earnings levels and is explicitly designed to return to AT&T's shareholders — in an ongoing, compounding fashion, because that's how the productivity factor works — all of the efficiency gains that we have made under price cap regulation. It's also contrary to what AT&T proposed for itself in its recent price cap review in Docket 92-134. In that docket, in response to suggestions that its own productivity factor be increased, AT&T said that such an increase would "violate the rationale and undermine the benefits of price cap regulation by reintroducing the worst features of rate of return regulation." AT&T continued:

Any argument for the potential adjustments apparently would be predicated on the erroneous assumption that AT&T's profitability has been unduly high, or that the proportion of AT&T's efficiency gains accruing to customers is insufficient. However, both the NOI and the Commission's prior price cap decisions establish that the price cap formula factors (and the absolute levels of the caps) would not be altered on this basis, at least absent compelling

Comments of AT&T, Price Cap Performance Review for AT&T, Dkt. 92-134, Sept. 4, 1992, p. 38.

evidence that the factors were producing unreasonable and unanticipated results.... the Commission stated that "[o]nly if [AT&T's rate of return] deviation from an acceptable level is <u>substantial and persistent</u> should changes be undertaken." More fundamentally, the Commission has repeatedly emphasized that any adjustment would not "recreate the disincentive to further productivity gains, as under rate-of-return regulation."

AT&T went on to contend that its increased return under price caps was "neither 'substantial,' 'persistent,' nor 'unintended.'" It is true, as AT&T said at that time, that:

all the many benefits of price cap regulation stem from this potential for increased profitability. A broader zone of reasonable returns is a necessary complement of providing both greater risk and reward, and increased returns demonstrate that the price cap system of incentives is proving successful.

AT&T admitted that its interstate rate of return during the price cap period was 13.2 percent. That substantially exceeds our own returns, without even correcting for significantly different depreciation schedules.

AT&T also submitted a report, "Productivity Gains Resulting from Interstate Price Caps for AT&T," by Richard Schmalensee and Jeffrey H. Rohlfs of NERA, that measured productivity gains using a TFP approach, not with the

¹d., pp. 38-39 (brackets and emphasis in original).

²⁹ Id., p. 45.

³⁰ Id., pp. 47-48.

^{31 &}lt;u>Id.</u>, p. 46.

earnings-based method now advanced by AT&T in this proceeding. 32
The Commission accepted AT&T's contentions with little comment
and retained the 3.0% productivity offset. 33

AT&T's changed position on productivity (and earnings, and market power) in this proceeding may demonstrate either the most surprising conversion since St. Paul's, or a congenital lack of shame. Legally, AT&T is free to be hypocritical. The Commission is not. For the Commission to change its position without explanation, and determine that higher earnings compel a higher productivity factor for us but not for AT&T, would be arbitrary and capricious.

In its Report filed with USTA's Reply Comments in this docket, NERA shows that AT&T's model may have markedly overstated its recommended productivity differential of 2.67% by failing to recognize the cumulative nature of productivity gains in its analysis. Therefore, AT&T's recommendation actually may be for a 4.63% productivity factor rather than the 5.97% factor as its Comments proposed. 34

In Table 2, we've replicated AT&T's methodology. Our calculations, using the data sources cited by AT&T, produce a cumulative "productivity" level of 4.28% -- far below the 7.6% alleged by AT&T. AT&T apparently used incorrect ROR data.

³² See AT&T, Appendix B.

Price Cap Performance Review for AT&T, 8 FCC Rcd. 6968, para. 6 (1993).

NERA June 29, 1994 Report, pp. 35-36 (3.3% productivity plus 1.33% differential).

TABLE 2
PACIFIC BELL
CC DOCKET 94-1
REPLICATION OF APPENDIX B
(\$000s)

									RESULTS AT 11.25%				
	4301 DATA			TARIFF PERIOD		REVISED	SHARING	REV W/				COMPOSITE	
_	REV A	Return B	ANI C	PCI D	API E	REV F=D/E*	ADDBACK G	ADDBACK H=G+F	REV I	PCI J=I/H*	PROD K	PROD	
		_	· ·	~	_	A	Note 1	11-0:1	Note2	D	Note 3	Note 4	
Jan 1991- June 1991													
CL	380,480	85,855	1,275,269	0.9784	0.9784	380,480		380,480	373,205	0.9597	0.0298	0.0024	
TS	268,066	49,030	793,474	0.9805	0.9805	268,066		268,066	265,801	0.9722	0.0182	0.0011	
SA	113,342	22,345	338,851	0.9803	0.9803	113,342		113,342	111,650	0.9657	0.0727	0.0018	
IX	930	234	35	1.0000	1.0000	930		930	810	0.8715	0.1285	0.0000	
Total	762,818	157,464	2,407,629			762,818		762,818	751,467				
June 1991-Dec 1991													
CL	366,250	71,787	1,263,949	0.9075	0.9075	366 ,25 0							
TS	266,999	37,952	778,682	0.9444	0.9444	266,999							
SA	107,779	15,774	322,471	0.9744	0.9743	107,790							
IX	152	(126)	33	1.0000	1.0000	152							
Total	741,180	125,387	2,365,135			741,191							
Jan 1992 June 1992													
CL	372,539	86,893	1,279,715										
TS	274,222	55,538	754,875										
SA	112,829	23,934	324,885										
IX	302	(162)	314										
Total	759,892	166,203	2,359,789										
1991/1992 TARIFF PI													
CL	738,789	158,680	1,271,832	0.9075	0.9075	738,789		738,789	730,753	0.8976	0.0540	0.0086	
TS	541,221	93,490	766,779	0.9444	0.9444	541,221		541,221	537,498	0.9379	0.0499	0.0058	
SA	220,608	39,708	323,678	0.9744	0.9743	220,631		220,631	218,911	0.9668	0.0509	0.0024	
IX	454	(288)	174	1.0000	1.0000	454		454	612	1.3489	(0.3433)	0.0000	
Total	1,501,072	291,590	2,362,462			1,501,095		1,501,095	1,487,774				
July 1992-Dec 1992													
CL	371,385	78,461	1,273,663										
TS	274,159	51,864	744,453										
SA	112,552	12,365	402,759										
IX	253	(188)	270										
Total	758,349	142,502	2,421,145										
2 April	,50,5 %	308,705	2,390,467										
		200,100	-,-, -, ,										

Page 1 of 2 (follows p. 20)

TABLE 2 PACIFIC BELL CC DOCKET 94-1 REPLICATION OF APPENDIX B (\$000s)

									RESULTS AT 11.25%				
	4301 DATA			TARIFF PERIOD		REVISED	SHARING	REV W/		COMPOSITE			
•	REV	Return	ANI	PCI	API	REV	ADDBACK	ADDBACK	REV	PCI	PROD	PROD.	
	A	В	C	D	E	F=D/E* A	G Note 1	H=G+F	I Note2	J= I/H* D	K Note 3	Note 4	
Jan 1993 -June 1993	ı					/1	Note 1		110162	D	11000 5	1105	
CL	381,478	83,927	1,281,604										
TS	283,810	68,388	729,425										
SA	113,773	20,449	365,399										
IX	270	(209)	296										
Total	779,331	172,555	2,376,724										
1992/93 TARIFF PE	RIOD												
CL	752,863	162,388	1,277,634	0.8726	0.8726	752,845		752,845	743,253	0.8615	0.0458	0.0074	
TS	557,969	120,252	736,939	0.9173	0.9173	557,987		557,987	538,730	0.8857	0.0675	0.0079	
SA	226,325	32,814	384,079	0.9684	0.9657	226,954		226,954	231,680	0.9886	0.0284	0.0014	
IX	523	(397)	283	1.0030	1.0000	525		525	744	1.4224	(0.3758)	(0.0001)	
Total	1,537,680	315,057	2,398,935			1,538,311		1,538,311	1,538,311		, ,	•	
July 1993 - DEC 199	3												
CL	437,650	72,868	1,568,164	0.8354	0.8354	437,650	295	437,945	445,553	0.8499	0.0209	0.0020	
TS	274,895	52,996	680,057	0.9360	0.9355	275,018	1,081	276,099	267,300	0.9061	0.0232	0.0014	
SA	101,505	18,071	297,345	0.9638	0.9634	101,550	444	101,994	100,812	0.9526	0.0313	0.0007	
IX	306	100	172	0.8265	0.8205	308	1	309	259	0.6935	0.3205	0.0000	
Total	814,356	144,035	2,545,738		1	814,527	1,821	816,348	818,169				
THREE YEAR RES	ULTS												
	4,615,926	908,146	2,412,693	12.55%				4,618,572	4,595,721			0.0428	
				I	Revised Act	tual Return		909,892	(I-A)*(134)+ B			

Revised Rate of Return 12.57%

Note 1: Pacific Bell does not support the add back of sharing to determine rate of return. This addition was made only in an attempt to duplicate ATT's calculations. Note 2: (C*11.25%-B)*(.34/(1-.34))+F

Note 3: Prod @11.25 = (PCI @11.25/(PCI(T-1)*(1+DELTAZ/R))-1-GNPPI)*-1; for CL (PCI@11.25/(PCI(T-1)*(1+DELTAZ/R)*(1-g/2/(1+g/2)))-1-GNPPI)*-1 Note 4: Weighted average based on Revenue at 11.25%

Pacific Bell's ROR based on ARMIS data was 12.55%, not 12.98% as AT&T seems to have believed.

The Commission may disregard that AT&T's current position is inconsistent with the position AT&T has taken in the past. But the Commission cannot disregard that AT&T's proposal is inconsistent with price cap principles. Our revenues under price cap regulation have shown little growth. Our financial results, in terms of rate of return on ratebase, are due to more efficient, productive, and innovative behavior. AT&T's proposal (and the others like it) would completely eliminate the incentive to be efficient, productive, and innovative. AT&T's proposal would flow through all the benefits of our increased efficiency to its corporate bottom line by requiring dollarfor-dollar reductions in LEC price cap indices. Success would be penalized; failure would be rewarded. Since we compete with our access customers for both customers and capital, the existing anticompetitive bias of the rules would be strengthened.

The General Services Administration (GSA) also urges change in the productivity factor based on the LECs actual earnings performance. GSA suggests that the productivity factors should have been set at 4.9% and 5.9% (instead of 3.3% and 4.3%) to keep our rate of return at 11.25%. It suggests the productivity factor be adjusted by half of the difference between expected and realized productivity at the time of each price cap review. This would result in new productivity factors of 4.1 and 5.1%. (GSA, p. 10.) This may seem like "half a

loaf," but it's still inconsistent with price cap principles. Recapturing productivity gains would destroy efficiency incentives that make price cap regulation work. If we had to give back in future periods more than half 35 of any efficiency gains, and give back half of any increased earnings from those gains in the current period because of sharing, our incentives would scarcely be different from what they were under ROR regulation.

MCI recommends that the productivity factor be increased to 5.9% and that there be a one-time decrease in the LECs' price cap indices. (MCI, p. 18.) MCI suggests the Commission's original short term formula should be adopted after dropping the "controversial 1984 data point." MCI says a long term study wouldn't be valid because under price cap regulation, the "LECs have realized high profits." (See Id., p. 22.)

MCI's is a backwards, result-driven logic: any evidence that doesn't support its predetermined conclusion is, ipso facto, "controversial" and should be disregarded. Other than noting that the 1984 data point changes the outcome of a short-term study, MCI doesn't explain why it should be considered invalid. This is an old argument, ³⁶ and accordingly, MCI doesn't use any post-1990 price cap data, either.

³⁵ Because the productivity factor compounds.

Policy and Rules Concerning Rates for Dominant Carriers 4 FCC Rcd. 2873 (1989) ("Price Caps R&O); 5 FCC Rcd. 6786, para. 83 (1990) ("Price Caps 2nd R&O); 6 FCC Rcd. 2637, para. 24 (1991) ("Price Caps Recon.").

Nor do changes in earnings compel the use of an interstate short-term study, as MCI suggests. Just the opposite: the virtue of a longer term study is that it smoothes out the effect of one-time events. MCI presents no information that wasn't available to the Commission in 1990. If MCI had bothered to update the Commission's short term formula and the longer term formula, it would have gotten decidedly different results. NERA updated both of the Commission's productivity studies (Spavins-Lande and Frentrup-Uretsky) and found that these methods would now provide a differential productivity factor of 2.4%. 37

The Christensen Report filed with USTA's Comments is a long-term study (which moots any "controversial" data points in short-term studies), is based on total company not just interstate results, and includes up-to-date data. Christensen shows that, if anything, the current productivity factor considerably exceeds our actual long run productivity.

Moreover, contrary to claims (however irrelevant to price cap theory) that our productivity will increase, Christensen shows that our TFP will be significantly reduced by competition. 38

That's why we advocate that any productivity offset that the Commission does adopt should be applied to our depreciation

³⁷ See NERA June 29, 1994 Report, p. 2.

Christensen May 9, 1994 Report, p. 23.

deficiency reserve, a competitive handicap that discourages new investment.³⁹

ICA also recommends a higher productivity factor, but doesn't offer any quantitative evidence. ICA does recognize "that the data and methods used to develop the initial productivity offset for the LEC price cap plan suffered from flaws that should be corrected.... In the review phase, ICA believes that the FCC should given [sic] substantially more weight to more recent data and to actual calculations of Total Factor Productivity that replicate the methods used by the US Government to calculate Multi-Factor Productivity." (ICA, p. 13.) We agree with ICA on this score. The only such study submitted in this proceeding, however, is the Christensen study, and it doesn't support ICA's unsupported allegations that "the minimum productivity for LECs in the plan should be raised to at least 5.5% per year, or higher if the record warrants it." (ICA, p. 12.) Instead, Christensen's comprehensive TFP study shows that the productivity differential the Commission should adopt should be 1.7%.

The ICA suggests that "it would also be desirable for the Commission to specify an X-factor for each of the 8 or 9 largest LEC operations, because the current single average productivity value introduces its own set of incentive

This depreciation deficiency reserve is another artifact of ROR regulation. It assumes a monopolized market where capital recovery can both be deferred and, albeit with a lag, fully recovered. That won't be the case. As Commissioner Barrett has pointed out, the rationale for prescribing depreciation lives vanishes when ROR vestiges like the backstop mechanisms are done away with. (See Pacific, p. 42.)

distortions" (p. 12). Individual company productivity offsets are inconsistent with price caps. As Schankerman writes for GTE, "[t]o preserve efficiency incentives in the price cap and to prevent strategic behavior aimed at influencing the productivity offset, the vardstick index [the X-factor] must be insulated from the operational and investment decisions of individual firms." 40 The CPUC agreed, saying: "We find that a differential productivity factor representing telecommunications industry productivity in excess of economy-wide productivity continues to be a reasonable method of calculating the productivity factor." The CPUC "rejected an analysis or approach that maintains the link between performance and revenues such as exists under rate-of-return regulation."41 concluded that "a productivity factor based on external measures provides the most effective incentives to the LECs to operate efficiently. 42

Based on an ETI study, Ad Hoc recommends a productivity offset of 5.8%. ETI averages the TFP results for seven companies (3.8%), adding an increment for an alleged difference in input prices for these seven companies (1%) and adding another increment for "stretch" (1%) to obtain a TFP offset of 5.8%. (ETI, p. 54, n.96.) It's correct in principle to use a TFP approach, but ETI's study isn't valid. First, it's

See Schankerman May 9, 1994 Report, p. 23.

Application of GTE Calif. Inc. (U-1002-C) for review of the operations of the incentive-based regulatory framework adopted in D.89-10-031, D.94-06-111, pp. 33, 34.

⁴² Id., at 30.

based on only seven companies, which together cover only about 35% of the U.S. population. 43 Second, each company is weighted equally, despite the fact that these companies serve significantly different sized populations. Finally, as NERA shows, the assumption that input prices for the LECs are about the same as for the economy as a whole over the long term is valid. There is no need to add an increment for a difference in input prices. 44 As NERA also explains, input price measures vary greatly from year to year. So short-term price changes do not justify changes to the price cap formula.

Ad Hoc's (p. 50) recommendation could have left the mistaken impression that the CPUC was about to implement an input price adjustment. In its recent intensive review of price caps for Pacific Bell, the CPUC rejected the adoption of an input price adjustment in its final decision. The Commission was concerned because the

... determination of the "W" factor [input price adjustment recommended by ETI] would involve examination of California LECs' actual inputs. As we stated in D.89-10-031, if such an examination were only a straightforward determination of inputs with no assessment of reasonableness, any incentive for efficient operations would be significantly eliminated because the effect

U.S. 1993 Statistical Abstract, Table 32, 1990 Census of Population, pp. 30-31.

See NERA May 9, 1994 Report, pp. 14-16 and NERA June 29, 1994 Report, pp. 22-31.

of input changes would be passed through directly to ratepayers.

The CPUC added that:

An evaluation of the reasonableness of the inputs would reconnect the link we have tried to sever between performance and revenues. The "W" factor attempts to take us down a path the Commission has distinctly rejected.

This is the same factor that ETI recommends.

The Commission has provisionally adopted a productivity offset for monopoly cable television providers of 2.0 percent. ⁴⁷ AT&T currently has a 3% offset for Basket 1 services. ⁴⁸ The Commission should be mindful that, given the convergence of these industries with our own, ⁴⁹ the adoption of substantially different productivity factors for LECs, IXCs, and cable TV providers can have unintended and anticompetitive effects on the marketplace.

Application of GTE Calif. Inc. (U-1002-C) for review of the operations of the incentive-based regulatory framework adopted in D.89-10-031, D.94-06-111, p. 13.

⁴⁶ Id., p. 14.

Implementation of Sections of the Cable TV Consumer
Protection Act of 1992: Rate Regulation and Adoption of a
Uniform Accounting System for Provision of Regulated Cable
Service, MM Docket No. 93-215 and CS Docket No. 94-28, para. 320, released March 30, 1994.

Price Cap Performance Review for AT&T, 8 FCC Rcd. 6968, para. 20 (1993).

⁴⁹ See Pacific, p. 94.

Figure 1 (above, following p. 11) illustrates the effect an unreasonably high, compounding productivity factor could have on our financial integrity.

The top solid line of Figure 1 depicts Pacific's 1989-93 earned net income normalized for accounting rule changes, restructuring charges, and other such events. The bottom solid line shows Pacific Telesis' dividend payments. The upward slope equates to a compound annual growth rate of 4.06%. The gap between the two lines represents net income available after dividend and payments to finance investment growth. The top dashed line shows the 1989-93 results we would have achieved if a 5% productivity factor had been required in both jurisdictions. The dotted/dashed line immediately below represents the 1989-93 results Pacific would have achieved if faced with a 6% productivity offset.

"stretch" or consumer productivity dividend factors adopted by both Commissions. Even a "minor" increase above a 5% factor would have resulted in earnings not meeting dividend requirements by 1993. A 6% productivity offset would barely have met dividend requirements in 1991. From the Commission's perspective, Figure 1 demonstrates that adoption of a higher productivity factor could be unlawful under Hope, Bluefield, and

⁵⁰ While it is true that a corporation's Board of Directors may eliminate, lower, retain, or raise its dividend, it is also true that few decisions have a greater effect on the market price of a stock, and therefore on its total return. This is in fact a (correct) assumption of the DCF model that AT&T uses (AT&T, Appendix D) to determine investor required returns on equity.

other precedent. 51 It would gut our ability to fund new infrastructure.

III. PRICING ISSUES.

A. The Common Line Formula

WilTel (p. 26), Sprint (p. 17), MCI (p. 38), and AT&T (p. 27) contend that the Balanced 50/50 formula which is currently used to calculate common line rates should be changed to a per line formula. The principal reason they give is that the LECs allegedly do nothing to stimulate interstate access line demand growth.

In its orders adopting price cap regulation, the Commission already considered and resolved such contentions. ⁵² In essence, because it's impossible to distinguish the effects of LEC demand stimulation from IXC demand stimulation, the Commission attempted to split the difference by adopting the 50/50 formula. ⁵³ No valid new reason is offered to change the formula to a per line one.

AT&T and MCI allege that sluggish growth in common line demand proves they were right. AT&T for example says that access line growth averaged 4.56% before price cap regulation and 3.24% afterward. (AT&T, p. 27.) MCI adds that this

Works, 262 U.S. 679. See also Jersey Central Power & Light Co. v. FPC, 810 F.2d 1168 (D.C. Cir. 1987).

Price Caps R&O, 5 FCC Rcd. 6786, para. 55 et seq.,;
Price Caps Recon. 6 FCC Rcd. at para. 5 et seq.

⁵³ Id.

slowdown in access line growth occurred despite MCI's increasing its market share from 15.3% to 18.4%. (MCI, p. 37, n.66.) Whether these contentions are true or not, they aren't relevant to what formula is used for setting common line rates. The first three years of price cap regulation also coincided with a recession that depressed the formation of new households and other economic activity usually linked to new telecommunications demand. Switched usage in general grew poorly between 1990 and 1993. As AT&T has elsewhere noted, facilities normally do not grow as fast as minutes of use.⁵⁴

anything about the relative contribution to access line growth of IXCs and LECs. It's obviously contradictory to assert that IXCs deserve all the credit for stimulating access line growth, but LECs are to blame for any slowdown. The truth is that wireline telephone penetration is getting closer to 100% all the time and faces competition from new media (see Pacific, pp. 74-96), which makes further wireline growth difficult in absolute terms.

The LECs spend considerable amounts of money to encourage use of the network. Because of access charges, it's generally in our interest to encourage network usage without respect to network boundaries. The IXCs, on the other hand (as MCI's growth in market share demonstrates), tend to target their efforts to capturing customers from other IXCs.

See Local Exchange Carrier Switched Local Transport Restructure Tariffs, Dkt. 91-213, Petition of AT&T, filed October 7, 1993, p. 17.

Sprint (p. 15) and AT&T (p. 28) also assert that LEC incentives to be efficient would be increased through use of a per line formula. The best way to stimulate efficiency isn't to cap revenues but to reward cost savings. The way to do that is to eliminate the backstop mechanisms. (See Pacific, pp. 43-44).

As Ameritech points out in its Comments (p. 17), the 50/50 formula doesn't award any benefit of usage growth to LECs at all, since it's coupled with a higher productivity offset. As Ameritech also points out, "the anomaly of the CCL charge that gives rise to the unique common line formula is the fact that it is assessed as a usage-based charge on LEC switching but recovers non-traffic sensitive costs that don't have anything to do with LEC switching." (Ameritech, p. 18.) There is a solution to this anomaly. As we advocated in our Comments (p. 51), LECs should be free to recover common line costs through end user line charges. ⁵⁵ If common line rate reductions are flowed through to end users, this would undeniably stimulate usage of both IXCs' and LECs' networks. It would also moot the issue of common line growth.

All of the controversy over the proper common line formula could be eliminated by using a differential TFP offset, as we recommend. TFP is based on total output and contains all

⁵⁵ AT&T also notes that the per-line formula is a second-best solution and recommends the Commission allow common line costs to be recovered from end user charges. (AT&T, p. 27, n.34.)

aspects of demand including access lines and minutes of use. ⁵⁶ Dr. Harris points out that "as output grows, carriers are able to realize additional scale economies and justify faster replacement with more technologically advanced equipment. Therefore, the productivity offset already incorporates these effects of growth, so the price cap formula should not 'double count' the effects of growth by adding a common line adjustment factor." ⁵⁷ All of the evidence argues for the elimination of the common line adjustment.

B. "Cost-Based" Pricing Issues

Nowhere is the argument for protectionism made as baldly as when WilTel, CompTel, and others contend that when we price services according to economic cost, market demand, and other factors normally taken into account by rational businesses like themselves, it's anticompetitive or unlawfully discriminatory.

WilTel and CompTel complain that tandem-switched, DS1, DS3, and multiple DS3 services are not "cost-based." (WilTel, p. 22; Comptel, p. 10.) These are familiar arguments to anyone who has followed Docket 91-213, in which the Commission replaced the equal charge per unit of traffic rule for switched transport with an interim rate structure that more closely resembles that of functionally equivalent special access rates. To the uninitiated, the arguments are easier to understand -- and are

See NERA May 9, 1994 Report, p. iii.

⁵⁷ Harris June 29, 1994 Report, p. 28.

exposed as specious -- when it's understood that by "cost,"

CompTel and WilTel aren't referring to the "cost" they take into account when they set their own prices. WilTel doesn't set its own prices for fiber optic transport based on units of capacity, for the obvious reason that low-cost customers resent being charged an equal charge per unit of traffic for a commodity with a marginal cost, as WilTel itself says, that is "close to zero."

(WilTel, p. 24.) WilTel takes this position because they compete with us and want the price umbrella maintained. CompTel takes this position because its members compete with AT&T, MCI, and Sprint, who might benefit if transport could be priced according to its real cost characteristics.

CompTel's assertions in Docket 91-213, the annual access charge proceedings, and in this docket have been so consistently untrue that one almost has to admire their persistence in repeating them. For example, CompTel charges that "tandem switches are not stand-alone machines ... the substantial majority of access tandems are collocated in switches that also perform end office functions ... any rational allocation of costs to tandem switching must acknowledge the multiple functions of the associated equipment and assure a uniform allocation of overhead equipment and assure a uniform allocation of overhead among these functions." (CompTel, pp. 7-8.) In fact, of Pacific's nineteen access tandems, not a majority but only two perform end office functions. In these two tandems, an originating call is processed first through the end office switching function, then connected via a loop-around

trunk (essentially common transport) to the other part of the switch that performs the tandem switching function. (A terminating call would be processed likewise but in the reverse order.) The costs of processing any such call run consecutively, not concurrently. That's why in Docket 91-213, the Commission recognized that, using Parts 32, 36 and 69 of its rules, "it is easy to trace tandem switching costs through the cost allocation process." The Commission also ruled that "the [tandem] revenue requirement can be computed in a straightforward manner by adding the same proportion of overhead to tandem investment and associated expenses as the amount of overhead loaded on the transport category as a whole." 59

Thus tandem switching rates don't subsidize local switching rates. As a result of the orders in Docket 91-213, tandem switching rates <u>are subsidized by</u> usage-based transport rates, which were required to recover 80% of tandem costs so as not to "endanger the availability of pluralistic supply in the interexchange market." 60

Transport Rate Structure and Pricing; Petition for Waiver of the Transport Rules filed by GTE Service Corp., 7 FCC Rcd. 7006, at para. 3 (1992) ("GTE Waiver Petition - Transport Pricing).

⁵⁹ Transport Rate Structure and Pricing, 8 FCC Rcd. 5370, para. 45 (1993).

That CompTel and others were not satisfied with the result of 91-213, which so unashamedly favored them, illustrates the futility of "managing" competition. As Thucydides observed of empires, competitive enterprises can only grow, or die. A compromise, however one-sided or unprincipled, is never good enough to satisfy a vigorous competitor.

Subsidies like the ones the Tier 3 IXCs receive are absolutely unsustainable. If we cannot price our services based on our economic costs, everyone but high-cost customers will eventually leave our network. As the Commission observed in Docket 91-141,

Denying the LECs [pricing] flexibility ... will not prevent the larger IXCs from obtaining discounts, either from CAPs or through self-supply, but will only prevent them from getting the discounts from the LECs. Thus, a ban on discounts would disadvantage the LECs without providing small IXCs the benefits they seek to achieve.

Accord, Stephen Breyer. In his decision for a panel of the First Circuit Breyer wrote,

a practice isn't "anticompetitive" simply because it harms competitors. After all, almost all business activity, desirable and undesirable alike, seeks to advance a firm's fortunes at the expense of its competitors. Rather, a practice is "anticompetitive" only if it harms the competitive process. It harms that process when it obstructs the achievement of competition's basic goals—lower prices, better products, and more efficient production methods.

Town of Concord, Mass. v. Boston Edison Co., 915 F.2d 17, 21 (1st Cir. 1990) (citations omitted). It's notable that Breyer did not include "a pluralistic supply of competitors" among "competition's basic goals."

Expanded Interconnection with Local Telephone Company Facilities, 8 FCC Rcd. 7374, para. 117 (1993).